

**RADER,****FISHMAN****& GRAUER****PLLC**

*Worldwide Intellectual Property Matters • Patents • Trademarks  
Litigation • Copyrights • U.S. and Foreign Portfolio Management  
Computer and Internet Law • Trade Secrets • Unfair Competition*

RECEIVED  
CENTRAL FAX CENTER

OCT 07 2008

To: Commissioner for Patents

From: Steven L. Nichols

Fax: (571) 273-8300

Pages: 7 pages including coversheet

Phone:

Date: October 7, 2008

Re: Application No. - 09/821,648

☒ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential, and exempt from disclosure under applicable laws. If the reader of this message is not the intended recipient or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return original message to us at the above address via U.S. Postal Service.  
Thank you.

**Transmitted, herewith, are the following documents:**

1. Fax Cover Sheet (1 page)
2. Transmittal Form (1 page)
3. Request for Rehearing Under 37 CFR 41.52 (5 pages)

I hereby certify that this correspondence is being facsimile transmitted to the Commissioner for Patents via the USPTO central facsimile number, (571) 273-8300.



Rebecca R. Schow  
October 7, 2008

OCT 07 2008

PTO/SB/21 (09-08)

Approved for use through 10/31/2008. OMB 0851-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

7

Application Number 09/821,648

Filing Date March 29, 2001

First Named Inventor Zheng J. Geng

Art Unit 2621

Examiner Name REKSTAD, Erick J.

Attorney Docket Number 40398-0017

**ENCLOSURES (Check all that apply)**☐ Fee Transmittal Form☐ Fee Attached☐ Amendment/Reply☐ After Final☐ Affidavits/declaration(s)☐ Extension of Time Request☐ Express Abandonment Request☐ Information Disclosure Statement☐ Certified Copy of Priority Document(s)☐ Reply to Missing Parts/  
Incomplete Application☐ Reply to Missing Parts  
under 37 CFR 1.52 or 1.53☐ Drawing(s)☐ Licensing-related Papers☐ Petition☐ Petition to Convert to a  
Provisional Application☐ Power of Attorney, Revocation☐ Change of Correspondence Address☐ Terminal Disclaimer☐ Request for Refund☐ CD, Number of CD(s) \_\_\_\_\_☐ Landscape Table on CD☐ After Allowance Communication to TC☐ Appeal Communication to Board  
of Appeals and Interferences☐ Appeal Communication to TC  
(Appeal Notice, Brief, Reply Brief)☐ Proprietary Information☐ Status Letter☒ Other Enclosure(s) (please identify  
below):

1. Fax Cover Sheet

2. Request for Rehearing Under  
37 CFR 41.52

Remarks

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name Rader, Fishman &amp; Grauer PLLC

Signature

Printed name

Steven L. Nichols

Date

October 7, 2008

Reg. No.

40326

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first-class-mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature

Typed or printed name

Rebecca R. Schow

Date

October 7, 2008

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

40398-0017

09/821,648

RECEIVED  
CENTRAL FAX CENTER

OCT 07 2008

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Patent Application of

Zheng J. Geng

Application No. 09/821,648

Filed: March 29, 2001

For: Method and Apparatus for  
Omnidirectional Imaging

Group Art Unit: 2621

Examiner: REKSTAD, Erick J.

Confirmation No.: 5727

REQUEST FOR REHEARING  
UNDER 37 C.F.R. § 41.52Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Appellant respectfully requests rehearing under 37 C.F.R. § 41.52 and reconsideration of the Decision on Appeal in the above-identified patent application rendered August 11, 2008 (the "Decision"). Rehearing and reconsideration are respectfully requested based on the following arguments.

40398-0017

09/821,648

RECEIVED  
CENTRAL FAX CENTER

OCT 07 2008

Claim 1:

Claims 1-6 were rejected as unpatentable under 35 U.S.C. § 103(a) in view of the combined teachings of U.S. Patent No. 6,118,474 to Nayar ("Nayar") and U.S. Patent No. 5,870,135 to Glatt et al. ("Glatt").

Claim 1 recites:

A method for generating a selectable perspective view of a portion of a hemispherical image scene, comprising the steps of:  
acquiring an omnidirectional image on an image plane using a reflective mirror that satisfies a single viewpoint constraint and an image sensor;  
defining a perspective viewing window based on configuration parameters;  
and  
mapping each pixel in the perspective window with a corresponding pixel value in the omnidirectional image on the image plane using a look-up table based on the configuration parameters.

As the record shows, Nayar is cited because Nayar teaches the collection of a wide-angle image using a truncated, substantially paraboloid-shaped reflector." (Nayar, abstract). However, in contrast to claim 1, Nayar fails to teach or suggest the claimed mapping of pixels from an omnidirectional image to a perspective viewing window "using a look-up table." "Glatt teaches the mapping from a fish-eye lens (which is hemispherical) to cartesian coordinates using a look-up table." (Action of 9/21/05, p. 2). Glatt describes in detail the equations that are used to map the image from the fish-eye lens. (Glatt, col. 7, line 46 to col. 8, line 43).

Glatt, however, does not teach or suggest how mapping would be performed using a look-up table for an image that comes, not from a fish-eye lens, but from a reflective mirror as claimed.

In the Decision, the Board agrees "with the Examiner that it would have been obvious to one of ordinary skill in the art at the time of the invention to have used a look-up table, as taught by Glatt, in the method taught by Nayar. (Ans. 4, 20-22.) This is no more than the

40398-0017

09/821,648

combination of familiar elements according to known methods, with no unpredictable results.” (Decision, p. 13). With all due respect, this conclusion cannot be supported by the evidence of record. Specifically, the Decision’s conclusion improperly overlooks the fact that, while Glatt teaches mapping using a look-up table, Glatt only teaches how to map an image obtained from a fish-eye lens. There is no teaching or suggestion in the prior art of mapping portions of an omnidirectional image from a reflective mirror to a perspective viewing window.

According to the Decision, Appellant’s claim presents “no more than the combination of familiar elements according to known methods, with no unpredictable results.” (Decision, p. 13). This is clearly incorrect because the record is devoid of any prior art that teaches one of skill in the art how to map from an omnidirectional image from a reflective mirror to a perspective window.

The conclusion of the Decision rests on the unstated assumption that the same formula and technique taught in Glatt with respect to a fish-eye lens can be used with respect to an omnidirectional image from a reflective mirror, as claimed. There is absolutely no evidence to that effect on the record. There has been absolutely no analysis on the record as to how one of skill in the art would have modified the techniques and formula of Glatt to account for an image coming, not from a fisheye lens, but from a reflective mirror. Such an analysis is expressly required by *KSR International Co. v. Teleflex Inc.*, 550 U.S. \_\_\_, 82 USPQ2d 1385 (2007).

According to *KSR*, the test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. § 103 is set forth in *KSR International Co. v. Teleflex Inc.*, 550 U.S. \_\_\_, 82 USPQ2d 1385 (2007):

“Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained;

40398-0017

09/821,648

and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented." Quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966).

In the present instance, neither the Examiner nor the Decision has addressed or resolved the fundamental differences between the cited prior art and the claimed subject matter, including the differences between mapping images from fisheye lens (as in Glatt) and from reflective mirrors (as in claim 1). *KSR* further requires that this analysis be explicit on the record. "To facilitate review, this analysis should be made explicit." (*KSR International Co. v. Teleflex, Inc.*, 550 U.S. \_\_\_\_ (2007)). For at least these reasons, the Examiner has failed to make out a *prima facie* of unpatentability as to claim 1.

Appellant's specification describes at length the formula and techniques that would be employed to map pixels from the omnidirectional image of a reflective mirror to a perspective viewing window. The Examiner has failed to demonstrate how or where this subject matter is found in the prior art and would be within the purview of one of ordinary skill in the art. Consequently, the Examiner has failed to establish that the method of claim 1 is even enabled by the prior art, let alone rendered obvious. "In order to render a claimed apparatus or method obvious, the prior art must enable one skilled in the art to make and use the apparatus or method." *Beckman Instruments, Inc. v. LKB Produkter AB*, 892 F.2d 1547, 1551, 13 U.S.P.Q.2d 1301, 1304 (Fed. Cir. 1989); *In re Payne*, 606 F.2d 303, 314, 203 U.S.P.Q. 245, 255 (CCPA 1979).

Again, the current record fails to take into account or to explain how one of ordinary skill in the art would have leaped the gap of mapping from a fish-eye lens (as in Glatt) to mapping from an omnidirectional image of a reflective mirror (as in Claim 1). Clearly, the

OCT 07 2008

40398-0017

09/821,648

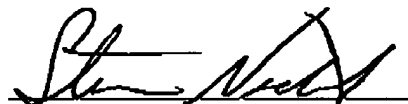
formula and techniques taught by Glatt are *not* those disclosed in Appellant's specification. Consequently, there appears to be no evidence in the record on which the Board can rest its conclusion that claim 1 is "no more than the combination of familiar elements according to known methods." (Decision, p. 13).

For at least these reasons, Appellant respectfully requests that the Board reconsider and withdraw the Decision as unsupported by the evidence of record.

In view of the foregoing, it is submitted that the final rejection of the pending claims is improper and should not be sustained. Therefore, a reversal of the Final Rejection of September 21, 2005 is respectfully requested.

Respectfully submitted,

DATE: October 7, 2008




Steven L. Nichols  
Registration No. 40,326

Steven L. Nichols, Esq.  
Managing Partner, Utah Office  
Rader Fishman & Grauer PLLC  
River Park Corporate Center One  
10653 S. River Front Parkway, Suite 150  
South Jordan, Utah 84095  
(801) 572-8066  
(801) 572-7666 (fax)

CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being transmitted to the Patent & Trademark Office facsimile number ~~571-273-8300~~ on ~~October 7, 2008~~. Number of Pages: 7

  
Rebecca R. Schow